Resources

HealthSt

Standards

Outcomes

Capacity

# Chapter 3
# Defining and improving core function capacity

*Public health agencies are a lot like fire departments. They talk, teach, and practice prevention at the same time that they maintain readiness to respond to crises and emergencies. They are most appreciated when they respond to emergencies. They are most successful—and least noticed—when their prevention measures work the best.*

*In another respect, the two are very different. Everyone knows what a fire department does; hardly anyone knows what a public health department does. The very existence of health departments is testament to the fact that, when legislators, county commissioners, and other policy makers understand what those departments do, they support them. It is a rare person who, once familiar with the day-to-day activities of a public health department, would want to live in a community without a good one.*

*Which raises some big questions: What constitutes a well-functioning local public health jurisdiction and a well-functioning State Department of Health? What must they be able to do? How much capacity is required? How do we measure that capacity, and how do we determine whether it is being used well? The Public Health Improvement Plan begins to answer these questions.*

*A well-functioning public health department must be able to carry out the core public health functions described in Chapters 1 and 2. This chapter defines the components of this capacity in a series of capacity standards. It identifies the new resources that will be needed by public health jurisdictions to meet their fundamental responsibilities. It describes specific interventions that public health agencies might employ and the outcome standards that will measure the effect of these interventions on peoples' health. Finally, this chapter examines the current and future role of clinical personal health services in the public health system.*

## Impediments to carrying out the core function capacity

*Overall, our current health system concentrates on clinical curative and therapeutic services rather than prevention. To some extent, the public health portion of the system has been influenced by that emphasis; when low income and other vulnerable populations have had difficulty getting clinical care, public health agencies have met some of the need. The emphasis on clinical services, both in the overall system and in public health, has sometimes impeded the capacity of public health jurisdictions to focus on the core function capacities and do what they do best; it has forced public health away from its roots in preventing health problems from occurring.*

### The heart of public health: Primary prevention

The most common and most effective preventive measures carried out by public health agencies are in the area of primary prevention, which has two main components: health **promotion** and health **protection**.

Health promotion includes health education and the fostering of healthy living conditions and life-styles. Health promotion activities may be directed toward individuals, families, groups, or entire communities. They help people identify health needs, obtain useful information and resources, and mobilize to achieve change.

Health protection refers to those population-based services and programs that control and reduce the exposure of the population to environmental or personal hazards, conditions, or factors that may cause disease, disability, injury, or premature death. Health protection includes immunization, infectious disease surveillance and outbreak investigations, water purification, sewage treatment, control of toxic wastes, inspection of restaurant food service, and numerous other activities which protect people against injuries and occupational or environmental hazards.

*For much of the past forty years, public health has been defined by a series of categorical programs and problems such as AIDS, tuberculosis, sewage treatment, immunizations, foodborne illnesses, and primary care for the under served. When a problem was identified and brought into public view, legislators enacted laws and appropriated funds to address that specific problem. Public health agencies responded by organizing themselves to carry out disease-specific or problem-specific programs.*

*Some categorical programs have been quite important and successful, such as the state's Omnibus AIDS Act and statewide sexually transmitted disease (STD) prevention efforts. However, the reliance on such targeted programs to finance public health has left these agencies with insufficient resources to continuously monitor health-related factors affecting the entire community and maintain the capability to deal with health threats not included in categorical programs in preventing health problems from occurring.*

*Partly because of the emphasis on clinical services and categorical programs, too few resources are now available to local and state public health agencies to meet their core responsibilities. While sophisticated medical techniques can help those who are ill or injured, the basic public health infrastructure that can prevent disease, injury, disability, and premature death is faced with serious problems. For example:*

- *Low immunization rates leave large segments of the community unprotected against infectious diseases.*
- *Protection of water supplies lags far behind the pressures of population growth, leaving many communities without assured potable water.*
- *Lack of reporting relationships between private and public sectors can prevent public health agencies from knowing about an epidemic before it reaches a large scale.*
- *Inadequate resources for health promotion and environmental protection activities have resulted in a general lack of awareness of the importance of these public health activities.*

*The PHIP is a blueprint for capitalizing on the strengths of the public health system while at the same time improving system infrastructure in the ways necessary to truly protect and promote health.*

## Adequate and stable public health infrastructure

*The capability to respond to infectious disease outbreaks or anticipate and prevent future problems cannot be created anew each time an epidemic breaks out, a water supply is contaminated, or a toxic chemical is spilled. Communities can identify public health problems and take timely, appropriate action only if well-functioning data and communication systems are already in place, and if epidemiologic and other expertise can be brought to bear quickly. In addition, activities designed to prevent disease and injury and promote and protect health require continuous, consistent effort. Usually, these activities must be consistently pursued over a period of years to achieve population-wide results. The public health system requires a solid, ongoing capacity to monitor, anticipate, and respond to health problems, regardless of which disease or public health threat has the public's attention at the moment.*

*Consider the four examples we started with in Chapter 1: Smoking, car crashes, foodborne illness, and water quality. These problems are not uniform throughout*

### Corralling disease through herd immunity

Immunizations against vaccine-preventable diseases are clearly beneficial for an individual. They also offer community protection through "herd immunity," a public health observation that the presence of disease in a population is minimized if enough individuals are vaccinated, because there are fewer opportunities for the disease to spread. A recent study by the Journal of the American Medical Association reported that of parents working in large corporations, only 45% of their two-year-olds had been adequately immunized. Some local health departments have developed creative strategies to reach busy parents with young children. Last summer one small Washington community joined together to reach out to parents. An "immunization event" was sponsored by a Rotary Club and publicized over radio and in the newspaper. A clown was on hand to entertain the children while the Cowlitz County Health Department nurses administered immunizations. This effort resulted in protecting an additional 200 children against infectious diseases. Not bad for a day's work.

*Washington, either geographically or from year to year. To successfully address them—and many other public health issues—we need the best possible information on the nature and extent of the problems. We have a certain capacity, right now, to assess these problems, but that capacity should be significantly improved.*

## Capacity standards: Defining the infrastructure

*The Public Health Improvement Plan identifies official state and local public health agencies as responsible for assuring that capacity standards are efficiently and continuously met within their health jurisdictions. These capacity standards are presented in the PHIP in functional groupings: community health assessment; development of public health policy; assuring community access to quality health care within the community; and providing the leadership, financial, and organizational administration required to integrate these functions into a coordinated, adaptive and effective public health system.*

*Many of the activities discussed in the capacity standards are not new to public health. They have, however, primarily been addressed by problem-specific, single-focus programs. As a result, state and local public health agencies might have an excess of capacity in one important, separately funded public health area such as childhood immunizable diseases, yet remain in dire need of capacity in other important but less well funded areas such as child abuse or youth violence prevention. As a result of legislatively mandated single focus "categorical" funding, public health agencies often lack the flexibility to shift resources from one program area to another or to integrate similar functions among many programs in an effort to increase efficiency within a health jurisdiction.*

*The PHIP vision is one in which problem-specific, separately funded public health programs become linked together through a series of 88 system-wide capacity standards. These standards focus less on a list of specific health problems or programs and more on the basic responsibility of state and local public health jurisdictions for assuring the conditions in which communities can be healthy.*

*The PHIP capacity standards promote locally inspired, state supported information systems as well as financing procedures that provide local public health with the flexibility to adequately address the identified health needs of their communities. Capacity standards promote accountability for development and implementation of public health policy through an ongoing process of evaluation and public and legislative review. Capacity standards promote innovation and partnership at the local level through the use of financial incentives while maintaining vigilance over potential statewide public health risks. Through the implementation of the PHIP, the health problems of Washington State will continue to be addressed, only in a more efficient, comprehensive, and participatory process. The public health system will begin a shift away from its present emphasis on single issue funding and individual patient treatment toward an approach that focuses on health protection and promotion for all members of the community.*

*Because many participants determine and deliver public health services, the standards are intended to encourage partnerships among organizations and agencies. However, the references to local or state jurisdictions in the capacity standards are deliberately narrow, applying only to formal, authorized, government structures. The terms "local" or "local public health jurisdiction" refer to an individual public health district or department, or a regional entity created to carry out specific public health*

### Capacity to assess health problems: A sample of the standards

**All public health jurisdictions, both state and local, must:**

- Develop, operate, and assure the quality of data management systems which meet local needs in order to systematically collect, analyze, and monitor standardized baseline data (Capacity Standard #2).
- Link with local and statewide databases in both the public and private sectors (Capacity Standard # 4).

**Each local public health jurisdiction must:**

- Conduct a regular community health assessment, using a standardized format such as the Assessment Protocol for Excellence in Public Health (APEX/PH) (Capacity Standard #5).
- Identify barriers in a community related to transportation, language, culture, education, information, and service delivery systems design that affect access to health services, especially for low income and other special populations (Capacity Standard #6).

**The state must:**

- Provide consultation and technical assistance to ensure a high standard of data analysis, dissemination, and risk communication (Capacity Standard #9).
- Survey the statewide availability of clinical and environmental laboratory services and help local health jurisdictions track this information (Capacity Standard #12).
- Assess the supply and distribution of health care providers, facilities, and services (Capacity Standard #14).

*functions for two or more local public health jurisdictions (but not the entire state). "State" refers to agencies of Washington State government that have public health responsibilities, primarily the Department of Health and State Board of Health. Other agencies are responsible for activities which impact the public's health.*

*The 88 core function capacity standards are listed on the following pages. They are the most definitive description we have to date of what well-functioning public health agencies must be able to do. They are a guide for public health jurisdictions as they examine and refine their role in protecting communities. As the Public Health Improvement Plan process continues, performance measures will be developed for these standards so they will become the basis for contractual arrangements between state and local jurisdictions. It is likely that the standards will undergo some modifications during this process. Please see chapter 5 for a detailed discussion of implementation steps for the 1994 PHIP.*

## The terms of partnership

*The roles and responsibilities of public health jurisdictions in the capacity standards are described by four terms:*

*Involve means that the public health jurisdiction has primary responsibility to carry out a specific function or make a specific decision, but should obtain the input of community members and organizations.*

*Collaborate means that one or more organizations in the community are, with the public health jurisdiction, equally responsible to carry out a specific function or make a specific decision, and the role of the public health jurisdiction is that of an equal partner.*

*Mobilize means that the community as a whole has responsibility to carry out a specific function or make a specific decision, and the role of the public health jurisdiction is to provide community leadership, act as a convener or catalyst, or provide supportive resources, as appropriate.*

*Assure means that the specific function may, in different communities or at different times, be the responsibility of the public health jurisdiction or other entities in the community. Within available resources and consistent with community and public health problem priorities, the public health jurisdiction must provide leadership in the community, collaborate with other organizations, or — as a last resort — provide the service itself. Assure is not intended to imply an entitlement or guarantee; it does, however, imply that a process has been developed to identify problems which the community wants to address.*

# The PHIP standards for core function capacity

## Health assessment

*Health assessment means the regular collection, analysis and sharing of information about health conditions, risks and resources in a community. Assessment activities monitor, analyze and evaluate community health status, risk indicators and, when necessary, health emergencies. They identify trends in illness, injury, and death and the factors which may cause these events. They also identify environmental risk factors, community concerns, community health resources, and the use of health services. Assessment includes gathering statistical data as well as conducting epidemiologic and other investigations.*

### Assessment capacity standards

*All public health jurisdictions, both state and local, must:*

1. *Have access to an integrated, centrally managed electronic network that provides access to federal, state and local information systems.*

2. *Develop, operate, and assure the quality of data management systems which meet local needs in order to systematically collect, analyze, and monitor standardized baseline data.*

3. *Conduct and publicize epidemiologic, sociologic, economic, and other investigations which assess the health of the community and access to health care. Help develop and evaluate prevention and control measures, research strategies, and policy options. Assure that investigation and communication methods are sensitive to individual, family and community needs, values, language, and cultural differences. Provide training opportunities to acquire these skills.*

4. *Link with local and statewide data bases, in both the public and private sectors.*

*Each local public health jurisdiction must:*

5. *Conduct a regular community health assessment, using a standardized format such as the Assessment Protocol for Excellence in Public Health (APEX/PH)[1].*

6. *Identify barriers in a community related to transportation, language, culture, age, disability, education, information, and service delivery systems design that affect access to health services, especially for low income and other special populations.*

7. *Assure access to high quality, cost-effective, timely environmental and clinical laboratory services which support outbreak investigations and meet routine diagnostic and surveillance needs.*

*The state must:*

8. *Develop community data standards as well as statewide standards for data use and dissemination. This should be a collaborative process with the Health Services Information System (HSIS), certified health plans (CHPs), and the public health system. This includes standardized approaches to health status indicators, geographic information systems, population data, and biostatistical calculations.*

9. *Provide consultation and technical assistance (using expertise from local jurisdictions, educational institutions, or other sources) to ensure a high standard of data analysis, dissemination, and risk communication.*

10. *Implement a fully integrated, secure statewide computer network that will include electronic mail, accessibility to documents and files, as well as the ability to access and amend basic data systems. This should be consistent with HSIS.*

11. *Evaluate and disseminate information regarding new health and information technologies in collaboration with the Washington Health Services Commission and HSIS.*

12. *Survey the statewide availability of clinical and environmental laboratory services and help local health jurisdictions track this information.*

13. *Provide a public health laboratory which is closely integrated with the needs and requirements of state and local public health jurisdictions and linked to other health agencies and laboratories via a courier system and electronic data system. The public health laboratory will:*

    - *Provide microbiological testing to assess infectious and foodborne disease outbreaks, to conduct disease surveillance and to recognize trends of emerging infectious diseases, including drug-resistant agents.*
    - *Measure toxicants to conclusively determine the extent of a community's exposure to environmental hazards.*
    - *Serve as the state's primary reference microbiology laboratory to test for and aid in the diagnosis of unusual pathogens, to confirm atypical laboratory test results, and to provide training and consultation.*
    - *Serve as a reference environmental radiation and chemistry laboratory to verify the results of other laboratories, to provide quality assurance oversight, and to provide training and consultation.*
    - *Provide laboratory screening of infants for treatable inherited metabolic diseases.*
    - *Conduct research to improve laboratory tests for more effective disease surveillance as well as to develop rapid methods for laboratory diagnosis.*

14. *Assess the supply and distribution of health care providers, facilities and services.*

## Policydevelopment

*A goal of the Public Health Improvement Plan is to assure that, at both state and local levels, policies are developed, implemented, and evaluated in a comprehensive manner that incorporates qualitative and quantitative scientific information and community values.*

*The most effective public health jurisdictions are supported by the communities they serve. It is, after all, the people of any community who make the daily decisions which determine the health of the community. Residents who seek better health can organize themselves toward that end. Public health jurisdictions can assist in this effort.*

*This capacity requires the ability to listen to residents who understand the strengths and weaknesses of those who live in the community. It requires the ability to prioritize work according to the needs of those in the community and build from their strengths rather than from institutional strengths.*

*Public health policy is established through processes involving many individuals and organizations, including state and local boards of health, elected officials, community groups, public health professionals, health care providers, and private citizens. Public health jurisdictions must have the legal authority to make and implement policy decisions. Decision makers must evaluate information from health assessment activities and listen to the concerns expressed by community members.*

*Public health jurisdictions must be able to evaluate both planned and current policies. In order to do this they must have the technical ability and resources to provide authorized decision makers with periodic information and data analyses regarding specific health issues. They must also have a system to facilitate community involvement and inform community members on a regular basis. State and local public health jurisdictions must have a similar framework for policy development activities, allowing for differences that result from their respective scope of responsibilities.*

### Policydevelopmentcapacitystandards

*All public health jurisdictions, both state and local, must:*

*Authority*

15. *Develop explicit and formal statements of the public health jurisdiction's legal authority to develop, implement, and enforce public health policy.*

*Policy analysis and formulation*

16. *Enact policies and procedures within the existing legal scope of authority. There are two kinds of authority: authority granted to state and local boards of health to enact rules, and authority to make decisions regarding those issues which do not require action by a board of health.*

17. *Involve the community in developing and analyzing policies of the public health jurisdiction.*

*18. Develop, analyze, and communicate alternative policies.*

*19. Provide accurate, timely, understandable information and data to policy makers (e.g., Washington Health Services Commission, and local and state elected officials), community leaders, certified health plans, and health care providers with emphasis on identifying threshold standards which have been exceeded. This includes technical support to decision makers to help them anticipate the effect of regulations, budget decisions, and policies on the community or the state as a whole.*

*20. Provide legal counsel to review policy decisions.*

*21. Promote state and local legislation and regulation aimed at reducing public health risk factors and promoting healthy behaviors. Evaluate current legislation and regulation to determine if it supports these goals.*

*Policy implementation*

*22. Translate enacted policies into operating program procedures including:*

- *Clarify or establish the legal basis and authority, beyond the legal provisions of the policy itself, that are required to proceed with implementation.*
- *Define and estimate the costs of personnel, equipment, and facilities associated with procedures that have been developed.*

*23. Estimate costs and effects of proposed policies and inform affected parties and the community.*

*Policy evaluation*

*24. Identify policy outcomes, develop outcome measures, evaluate them on a regular basis, and communicate the findings.*

*25. Evaluate program efforts:*

- *To assure that they address community needs and problems.*
- *To assess the relative efficacy, costs and benefits among specific prevention programs as well as between prevention programs, medical treatment, and rehabilitation.*

*Community collaboration and mobilization*

*26. Mobilize the community, and in particular health care providers, in a systematic and periodic process to set community priorities, develop policies and formulate strategies to address key public health problems, and for action on community issues based on results of a standardized assessment format such as APEX/PH[1].*

27. *Collaborate with community members and health care providers to inform the public about the current health status of the community, using formats appropriate to the needs of various individuals or organizations.*

28. *Provide information and data, as requested and appropriate, and in keeping with confidentiality requirements, to interested community groups for health related activities.*

## Administration

*To carry out its mission, and form successful community partnerships, each jurisdiction must have a clear administrative structure which supports the core public health functions. Effective administration is a critical element of all efforts to improve and promote community health. It involves a number of important features, including leadership, planning and financial and organizational management. All of the capacity standards assume that an effective administrative structure is in place. This is especially true of Policy Development, which includes key standards concerning community leadership and planning. Responsibilities related to the internal workings of the public health jurisdiction require the same leadership and management skills: agency and division directors must clearly assign responsibilities, delegate authority, and develop operating policies and procedures.*

### Administration capacity standards

*All public health jurisdictions, both state and local, must:*

*Agency management*

29. *Secure policy board authorization for operation of programs.*

30. *Periodically analyze and update the roles and authorities of units of government within the agency's jurisdiction, delineating all functional elements of the organization and their relationship to each other.*

31. *Regularly collect and analyze information describing agency and program administration, funding, activities, work loads, client characteristics, and service costs.*

32. *Develop a long range strategic plan and time-limited, measurable agency and program objectives.*

33. *Assure the collection, analysis, and use of information that is needed to evaluate the outcome of program activities on risk and protective factors and health status.*

34. *Maintain a management information system and electronic communication capacity that allows the analysis of administrative, demographic, epidemiologic, and service utilization data to provide information for planning, administration, and evaluation.*

35. *Participate in agreements with other jurisdictions, as appropriate, to manage costs.*

*Financial management*

36. *Designate a person who is responsible to oversee all financial responsibilities of the health jurisdiction.*

37. *Develop and implement a long term financial plan (i.e., extends beyond the operating budget cycle) that is consistent with the strategic plan identified in Standard 32.*

38. *Develop and implement budgets which reflect jurisdictional priorities and programs, address health problems, and assure that expenditures follow the budget and financial plan.*

39. *Involve professional and community groups in development, presentation, and justification of the budget.*

40. *Develop and manage contracts to provide public health services to or for community organizations, private nonprofit corporations, and health care organizations.*

41. *Assure that the policy board and staff understand their legal accountability and liability, as well as their general responsibility to the public for wise financial management.*

*Personnel management*

42. *Have a comprehensive system of personnel management that complies with appropriate federal, state, and local regulations, including documenting relationships with other units or departments of government which carry out personnel functions of the public health jurisdiction.*

43. *Have an established working relationship and labor agreement between the health jurisdiction policy board and each labor union representing staff, as appropriate.*

44. *Maintain a salary administration plan, authorized by the policy board and designed to attract and retain competent staff.*

45. *Develop and implement a staffing plan which includes recruitment and retention strategies and professional development opportunities, including continuing education and training in public health skills and competencies.*

## Prevention

*The heart of public health is prevention of disease, injury, disability, and premature death. Prevention includes:*

- *Primary prevention, the focus of public health, which reduces susceptibility or exposure to health threats. Immunizations are an example of primary prevention.*
- *Secondary prevention, which most often detects and treats disease in early stages. A program to encourage the use of mammograms to detect breast cancer is an example of a secondary prevention activity.*
- *Tertiary prevention, which alleviates some of the effects of disease, injury and disability through such means as habilitation and rehabilitation.*

*Preventive services are provided both one-on-one in clinical settings and to groups of people in the community. The primary focus of public health prevention is to protect entire communities or populations from such threats as communicable diseases, epidemics and environmental contaminants.*

*Certain clinical personal health services are included in the standards because they benefit both the individual and the community. Immunizations, reproductive services, and communicable disease screening and treatment are examples of services which are of public health significance. The absence of these services can have wide ranging effects for the community as a whole.*

*Two main components of primary prevention are health promotion and health protection.*

## Health promotion

*Health promotion includes health education and the fostering of healthy living conditions and life-styles. Health promotion activities may be directed toward individuals, families, groups, or entire communities. They help people identify health needs, obtain information and resources, and mobilize to achieve change. They foster an environment in which the beliefs, attitudes, and skills represented by individual behavior and the community norms are conducive to good individual and community health.*

*Health promotion includes communicating surveillance and epidemiologic data to public health officials, other health providers, industries, and the community as a whole. It includes working with communities on an ongoing basis to communicate relevant information, helping their mobilization efforts, and providing technical assistance and consultation.*

### Health promotion capacity standards

*All public health jurisdictions, both state and local, must:*

*46. Assure that the public is informed of the health status of the community, relevant health issues, and that education is provided regarding positive health behavior.*

*47. Assure the development and provision of culturally, linguistically and age appropriate health promotion programs for community health priorities, including interpretive services.*

*48. Collaborate with public and private agencies, health care providers, and CHPs in developing strategies to address public health risk factors.*

*49. Assure provision of services which enhance healthy family relationships and child growth and development.*

*50. Provide education and information to the general public about communicable and non-communicable diseases of public health importance.*

*Each local public health jurisdiction must:*

*51. Maintain an information and referral system concerning available health facilities, resources, and services.*

*The state must:*

*52. Provide health promotion models to address public health risk factors.*

*53. Assure that health promotion programs addressing health risk factors and positive healthy behaviors are fully implemented statewide, providing technical assistance as necessary.*

*54. Assure that continuing education programs are available that address disease and injury prevention to meet the specific needs of caregivers, health and facilities professionals, and other public and private partners.*

*55. Promote the use of K-12 school health education curricula.*

## Healthprotection

*Health protection refers to those population-based services and programs that control and reduce the exposure of the population to environmental or personal hazards, conditions, or factors that may cause disease, disability, injury, or death. Health protection also includes programs that assure public health services are available on a 24 hour basis to respond to public health emergencies and coordinate responses of local, state, and federal organizations.*

*Health protection includes immunization, communicable disease surveillance and outbreak investigations, water purification, sewage treatment, control of toxic wastes, inspection of restaurant food service, and numerous other activities that protect people against injuries and occupational or environmental hazards.*

*Health protection activities occur throughout the community, in homes, schools, recreation and work sites. Because of this variability, and the shared responsibility for safety, health protection activities require collaboration with many community partners.*

## Health protection capacity standards

*All public health jurisdictions, both state and local, must:*

*56. Perform training, monitoring, inspection, intervention, and enforcement activities that eliminate or reduce the exposure of citizens to communicable disease and environmental hazards in both routine and emergency situations.*

- *Develop protection programs, in accordance with federal guidelines and scientifically identified risk factors, that address priority health risk factors.*
- *Assure that communicable disease contact investigation and follow-up is performed in a timely and appropriate manner, in adherence to guidelines of the federal Centers for Disease Control and Prevention.*

*57. Assure that individuals, especially children, are immunized according to recommended public health schedules.*

*58. Assure the surveillance, diagnosis, and treatment of communicable diseases of public health significance.*

*59. Assure the provision of public health services which affect the community and high risk populations, including:*

- *Consultation and education services to day care centers and schools;*
- *Intervention with high risk families to provide standardized screening and assessment, education, counseling and referral (such as, Minnesota Parenting Inventory, Region X Child Health Standards);*
- *Community education on risk and harm reduction behavior;*
- *Outreach to individuals not accessing care.*

*60. Assure provision of reproductive health services in the community.*

*61. Collaborate with communities in developing local and statewide emergency response plans, including mobilizing resources to control or prevent illness, injury or death.*

*62. Provide ongoing public health staff training in emergency response plans, including participation in practice exercises on a routine basis.*

*63. Provide 24 hour telephone access to respond to public health emergencies.*

*64. Conduct inspections, monitoring activities, and compliance strategies consistent with state and local board of health rules and regulations.*

*Each local public health jurisdiction must:*

65. *Identify and control potential and actual hazards to public health, such as maintaining a safe water system, ensuring safe food handling practices in restaurants, and managing toxic spills.*

*The state must:*

66. *Coordinate with federal rule making agencies and the Congress to assure that they take into account the effects of federal rules and statutes on the health risks, protection needs, and resources of Washington State.*

67. *Develop, in cooperation with local health agencies, uniform statewide regulations and policies which guide the public health activities of direct service providers, the local public health jurisdictions, and state agencies.*

68. *Carry out direct regulatory responsibilities in those environmental health programs, including those imposed by federal mandate, which are not addressed by local jurisdictions.*

69. *Assist communities in developing emergency medical and trauma care services to provide immediate access to life saving interventions for illness or injury.*

70. *Support and assist local agencies' crisis response efforts:*

    - *Support local health agencies in the provision of laboratory services, food and water inspection, radiological assessment, and disease identification and testing during emergencies.*
    - *Help coordinate the transfer of needed personnel, resources, and equipment to emergency sites.*

71. *Designate the Department of Health as the lead agency, in the Washington State Comprehensive Emergency Management Plan, for coordinating all public health activities during emergencies.*

72. *Provide public information support to the Office of the Governor and to other state or federal emergency management agencies during emergency and disaster recovery operations.*

73. *Help coordinate and incorporate local emergency response plans into the Washington State Comprehensive Emergency Management Plan.*

## Access and quality

*Public health jurisdictions monitor and maintain the quality of public health services and participate in monitoring the quality of health and social services through credentialing and discipline of health professionals, licensing of facilities, and enforcement of standards and regulations. They also have a role to play in assuring that all residents have access to health services.*

*Efforts to assure access and quality of care require partnerships among many affected parties, sharing of data, and tracking of measurements, programs, and changes over time. They require ongoing efforts to obtain community and client perspectives on quality of care or services received.*

### Access and quality capacity standards

*Each local public health jurisdiction must:*

*74. Assure that prevention and intervention efforts for communicable diseases and other public health conditions, are being appropriately implemented.*

*75. Assure the competence of food handlers and other individuals whose activities can affect the health of the public who are not otherwise licensed or monitored by the state.*

*76. Collaborate with the community generally, and health care providers specifically, to reduce barriers to accessing health care and assure individuals and families are linked with health services.*

*The state must:*

*77. Assure access to, and appropriate use of, personal primary and preventive health services. This includes:*

- *Providing policy, financial, and technical support to meet access needs.*
- *Supporting community efforts to address unmet health needs.*
- *Assuring an adequate supply and distribution of high quality provider services.*
- *Assuring that appropriate interpretative services are available for those who need them.*

*78. Establish criteria to assess the competency of health professionals as well as design, implement, and evaluate credentialing and certification methods for health professionals, facilities and providers of other public services.*

*79. Assure that local health jurisdictions, contractors (including state funded public health programs), health care sites and providers comply with appropriate regulations and standards, and meet contractual obligations.*

*80. Promote best practices through the use of professionally adopted standards of care.*

*81. Assure that health care and public health providers have access to and use ongoing training and continuing professional education offered in appropriate educational programs.*

*82. Provide data and information to the Washington Health Services Commission on developing standards for certified health plans, and quality assurance and training activities to promote optimal health status of their enrollees.*

*83. Conduct quality assurance activities and operate state-mandated regulatory programs necessary to ensure that all laboratories produce high quality outcomes. Work with agencies to correct deficiencies and provide appropriate training programs.*

*84. Assure that laboratories that provide data for public health purposes (state public health laboratory, local health department laboratories, hospitals, and clinics) are linked through a statewide courier system and a common information management system which ensures ready access to analytical and diagnostic data.*

*85. Improve the quality assurance and analytical performance of clinical and environmental laboratories through training, consultation, technology transfer, and regulation.*

*86. Provide patient registries and other consumer access, utilization and outcome information necessary to evaluate performance.*

*87. Evaluate health system work force trends in coordination with the Health Personnel Resources Plan, and determine effect of health care reform on access to health care.*

*88. Designate the Department of Health as the primary advocate, along with other state agencies and public entities whose activities are intended to improve health status, to develop and implement policies and programs consistent with the PHIP.*

# Estimating the need for additional capacity

*State and local public health jurisdictions already carry out many aspects of the 88 standards. However, they do not have the necessary resources to achieve them all. This section describes the results of two PHIP processes: 1) An assessment of the performance of the core function capacities by Washington's official public health system. 2) An estimate of the resources needed to meet the PHIP capacity standards in the future.*

*A more detailed explanation of these analyses, Methodology for the Assessment of Performance and Resource Requirements, is available from the Department of Health upon request.*

## Carrying out the core function capacities

*One of the national year 2000 health objectives is to "Increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core function capacities of public health." To develop baseline data for monitoring progress toward this objective, the national Centers for Disease Control and Prevention (CDC) developed a questionnaire about the three core function capacities as defined by the Institute of Medicine (assessment, policy development, and assurance) and surveyed 395 local jurisdictions in six states in 1993. Respondents were asked to evaluate whether each of 10 public health practices were present in their jurisdiction, and to assess the adequacy of the performance of the practice by the entire community.*

*Washington State used the same survey in May 1994 to develop general information on our performance of the core function capacities. Officials in all 33 local public health jurisdictions of the state were asked to complete the questionnaire. Twenty-five jurisdictions responded. The table below shows the results of the survey, based on an average of the responses from all 25 jurisdictions, with the CDC survey results for comparison. In the table, the term "presence" means the existence of the function and the term "adequacy" is a judgement of how well the function is carried out.*

| | 1994 Washington survey: 25 local jurisdictions | | 1993 CDC survey: six states, 395 local jurisdictions | |
|---|---|---|---|---|
| **Function** | **Presence** | **Adequacy** | **Presence** | **Adequacy** |
| Assessment | 49% | 52% | 46% | 27% |
| Policy Development | 66% | 62% | 53% | 29% |
| Assurance | 75% | 59% | 68% | 40% |

*This information relates to the core public health functions as broadly defined by the Institute of Medicine. It conveys a general sense of the extent to which the core function capacities are carried out in Washington and how we compare with a group of other states (Alabama, Maryland, Mississippi, New Jersey, South Carolina, and Wisconsin).*

*This project also gathered information about performance of the categories of core function capacities as outlined in the PHIP capacity standards (assessment, policy development, prevention, administration, and access and quality). The standards were undergoing revision even as the surveys were being conducted, so the results must be viewed as generally indicative of levels of core function capacity performance, rather than as precise measures.*

*An assessment team from the Department of Health, the Washington State Association of Local Public Health Officials, and the University of Washington visited eight local health jurisdictions in June and July, 1994. At each of the sites, the team asked local public health officials about the categories of the PHIP capacity standards. In addition to determining whether the functions were being performed, the team also asked about the perceived importance of the functions, the degree to which the standards were being met (ranging from "fully" to "not at all"), barriers to meeting the standards, and present and future resource needs.*

*Based on an average of local public health jurisdiction responses, it was calculated that only 12% of the PHIP capacity standards were fully met in these health jurisdictions, ranging from 4% of assessment capacity standards to 25% of protection capacity standards.*

*Another part of this analysis focused on the State Department of Health. A questionnaire, completed by each of the six department divisions, assessed the performance of the PHIP capacity standards that the State Department of Health will be expected to meet. Based on an average of the division responses, the study team estimated that the department was fully meeting only 3% of the capacity standards.*

*Overall, the assessment of Washington's public health system shows most of the PHIP capacity standards are being addressed in some way, but that statewide, when both local and state agencies are combined, only 9% of capacity standards are being fully met.*

*While the work described above was general in nature, it did convey the clear message that there are deficits in our ability to fully meet the core function capacity standards, at both the state and local levels.*

## Resources needed to meet the capacity standards

*In order to estimate the resources needed to fully meet the capacity standards, the PHIP Capacity Standards Technical Advisory Committee (TAC) developed staffing estimates for local health jurisdictions, and the Department of Health divisions did the same thing for the Department of Health.*

*The Capacity Standards TAC and the Department of Health divisions focused on full time equivalent (FTE) staffing needs because the great majority of the operating costs of public health agencies are personnel costs and there are existing formulas for determining indirect operating costs per FTE. The use of work force to estimate an annual public health resource gap is not intended as the suggested approach for spending. For example, some capacity standards might be met through restructuring of the system, expanded use of technology, reallocation of resources, and extending public health partnerships with the private and voluntary sectors.*

*Subcommittees of the TAC made initial estimates of the numbers of FTEs needed to meet the standards in the six functional areas, identifying both the types and numbers of professionals required to meet the various responsibilities. It was clear that clusters of standards required similar kinds of skills and expertise, and that responsibilities of many types of public health personnel cut across the categories. For example, public health nurses have roles to play in assessment, policy development, promotion, protection, and access and quality.*

### Local government partnerships pay off

The Seattle Parks Department recently began to restore an abandoned landfill into a new public golf course. Given their prior experience with landfills, the Seattle-King County Department of Public Health required an immediate measurement of methane gas at the landfill site before any earth moving began. Methane gas is the main component of natural gas, and is a by-product of decaying vegetable matter; it is highly combustible. The methane levels exceeded 30% (normal levels are well below 1%), and gas was discovered migrating under an adjacent arterial street into a business district. The Health Department advised developing a gas control system to safely vent the gas, but the Parks Department had no funds. At the same time, the Seattle Center Coliseum Renovation Project learned that it would cost $1.2 million to dispose of its excavation soil. With technical advise from the Health Department, the Seattle Center Project agreed to pay for the $250,000 gas control system at the Interbay Golf Course Project in exchange for disposing its dirt at the golf course site. Because the Health Department knew what was going on in its community, both the Coliseum renovation and the golf course are now on schedule and there is no longer a risk to the Interbay community.

*The TAC as a whole refined the subcommittee estimates and determined what percentage of time each personnel type might spend doing each of the functions. The TAC estimates of local needs were then reviewed by representatives of fifteen local health jurisdictions, including administrators, health officers, nursing directors, and an environmental health director.*

*This process of developing and reviewing FTE estimates took three months. In general, reviewers felt that the FTE estimates were on target, though perhaps on the low side. Reviewers also commented that emphasis should be placed on the need for local health departments to "have access to" rather than to "hire" several kinds of professional personnel such as attorneys, labor negotiators, and other legal services personnel.*

*The conclusion of this work was that the public health system statewide (both the Department of Health and all the local public health jurisdictions) would need resources equal to 5,387 full time equivalent staff to fully meet all the capacity standards.*

*The estimated annual additional cost of fully meeting all the capacity standards would be about $104 million. This is the estimated resource deficit between where the official public health system is in 1994 and the PHIP vision of where the system should be in the future (2001). This estimate was primarily derived from an approximation of the resources (people, equipment, training and other operating expenses) it will take to annually operate an enhanced public health system.*

*The $104 million estimate is similar to the findings of a 1993 survey that estimated the costs of addressing urgent unmet public health needs in Washington State at $112 million a year. However, it is important to note that this estimate is only a reference point that will be refined and adjusted as cost saving models for public/private partnerships are tested and implemented, as public health work force skills and performance are enhanced, as communication and information technologies are applied, as the public health system is restructured, and as health system reform in the State of Washington evolves.*

*It is not recommended that this entire resource deficit of $104 million be made up during the upcoming 1995-1997 biennium. Instead, a six year phased approach should be followed and is described in chapter 5.*

## Future investment

*Current investment in the state's official public health system is estimated at $330 million a year (1994 dollars). Sources for this funding are federal, state, and local government contributions plus permit and user fees.*

*About 12 percent, or an estimated $40 million is now spent annually on providing clinical personal health services. Approximately $12 million comes from Medicaid reimbursement, other third party payers, and out-of-pocket payments by individuals. Since these types of payments are made directly to the individual service provider, this $12 million will increasingly flow to certified health plans providers as the public health system reduces its emphasis on the direct delivery of clinical and therapeutic services. This leaves about $28 million in federal, state and local government dollars expected to remain in the public health system following the final transition of these clinical services to certified health plans, assuming sustained federal and state funding and non-supplantation of local public health dollars (see Finance and Governance recommendation 16-A in chapter 4).*

### Assessing community health

In January, 1993, the Thurston County Public Health & Social Services Department began its community health assessment. The department's primary role was to collect county data and facilitate a communitywide effort to identify its health priorities. Local and comparative data were collected from state DOH databases, county communicable disease records, and the Centers for Disease Control and Prevention (CDC). Thurston County Health Department then compiled the data into a health status report and presented the information to the community. The health status report included information on environmental data, birth and prenatal statistics, infectious disease rates, injury morbidity and mortality rates, and maps, including growth areas, landfills and dumps, and zoning areas.

The report will be used by the Thurston County Community Health Task Force to identify community health priorities and craft an action plan that includes proven interventions and strategies to implement them. A principle resource for appropriate interventions will be the PHIP Key Public Health Problems-Appendix A. The community health assessment is an ongoing process: the task force, or its successors, will continue to meet periodically to evaluate the health priorities as well as the effectiveness of the interventions. Thurston County Community Health Task Force membership includes representatives from local health care, schools, business, churches, civic interests, labor, law enforcement, and environmental interest groups.

*To meet all of the PHIP capacity standards by the year 2001, it will be necessary to continue to add the equivalent of $104 million (in 1994 dollars), and to earmark specifically for meeting capacity standards the $28 million expected to remain in the system following the final transition of clinical personal health services to certified health plans. This assumes that certified health plans gradually take on more and more of the clinical personal health responsibilities now borne by public health and that universal access to health insurance is achieved, but that public health continues to receive the equivalent of the funds formerly used for personal services.*

## Improving health: Methods and measures

*The PHIP describes interventions for key health problems that state and local jurisdictions identified as current priorities. These are not the only interventions that might be effective, but they do represent ideas for action developed over a period of several months by many people representing a variety of professional and community perspectives. The responsibility for implementing the interventions lies not just with public health departments and districts, but with many other agencies and organizations as well. Public health is truly a community interest; efforts to protect and promote public health must involve numerous participants in every community, and must be undertaken from a firm fiscal and organizational foundation. These interventions are described in Appendix A.*

*With the capacity improvements called for in this plan, we could significantly improve our understanding of important public health problems in Washington. With stronger assessment, backed up by improved capacity for the other core function capacities—especially policy development and prevention—we will have the opportunity to intelligently choose the strategies that will address the most pressing problems in the most effective manner. This will set the stage for real improvements in health status, which is, after all, the ultimate goal.*

*In the public health field, health status is a term generally applied to groups of people, rather than to individuals. The health status of any individual person may vary considerably within short time frames; disease or injury may alter health status dramatically and abruptly. The health status of entire populations, on the other hand, will generally change in more gradual ways. It can be tracked, analyzed, and influenced through public health measures.*

*The group whose health is being evaluated might be the entire U.S. population, or the people of Washington State or one of its counties or cities. It might be the population of a geographic area served by a certified health plan, or the plan's enrolled population. The group might also be a sub-population defined by age, race, sex, or some other factor or combination of factors. For example, a particular analysis might examine the health status of African American women in King County age 65 and older.*

*We assess the health status of populations using such indicators as death rates and disease incidence and prevalence rates. No single indicator completely gauges the health status of a population, but some have been viewed as key indicators. A high rate of infant mortality, for example, may indicate a number of factors that affect health such as sanitation, nutrition, and access to medical care.*

### Public health intervention—A sample of the action strategies:

***Smoking:***

- Assess the smoking status of youth under age 18 by county.
- Eliminate distribution of free tobacco samples.
- Train health care providers to systematically identify tobacco users and provide advice on quitting.

***Car Crashes:***

- Promote public education on seat belt use and safe driving.
- Change driving under the influence standards to .08 blood alcohol level for adults.
- Expand the hospital data set to include location of injury incidents.

***Foodborne Illness:***

- Standardize food safety regulations used throughout the state by federal, state, and local jurisdictions.
- Strictly enforce food handling safety regulations at all levels of inspections.
- Encourage health care providers to test patients when foodborne disease is suspected.

***Water Quality:***

- Ensure that all domestic water supply wells comply with state siting and construction standards.
- Develop model management strategies for on-site sewage systems and implement them first within designated areas of special concern.
- Develop the capacity to identify on-site sewage systems that are not providing adequate treatment.

*Appendix A contains background material, proposed standards, and proposed interventions regarding thirty-nine key public health problems in five general areas:*

- *Infectious Disease*
- *Non-Infectious Disease*
- *Violence and Injury*
- *Family and Individual Health*
- *Environmental Health*

*Appendix A also contains outcome standards, which are long-term Washington State-specific objectives, generally for the year 2000. They define optimal, measurable future levels of health status, maximum acceptable levels of disease, injury, or dysfunction, and in some cases the degree to which a particular service or program is operational.*

*The plan also introduces the concept of threshold standards. Threshold standards define death rates or levels of illness or injury in a community or population which, if exceeded, may signal alarms for action. The initial response to exceeding a threshold should be to take a closer look at the situation to determine what may be occurring and then to decide what action is appropriate. A threshold is also a way of measuring progress toward an established outcome standard.*

## The role of clinical personal health services in public health

*Public health has certain fundamental responsibilities for promoting and protecting the health of individuals, families, and communities. In the past, public health has fulfilled some of these responsibilities by providing direct clinical personal health services. The three most important reasons that public health has been involved in providing medical care are:*

- *Protecting communities from threats to health posed by individuals with highly communicable diseases such as sexually transmitted diseases, bacterial meningitis, and tuberculosis. Preventing the spread of such diseases requires expertise and approaches to service delivery not commonly found in the health care system. These include treatment of the affected individual, contact tracing to identify others who might have been exposed, education, follow-up, and screening and treatment, as necessary, of asymptomatic persons.*
- *Providing services to people who have not had adequate income or health insurance coverage to access the health care system. State and local public health jurisdictions have provided primary clinical care at no or minimal cost to individuals through public and community-based clinics. The public health system is sometimes referred to as a "safety net" provider because of this.*
- *Providing services to people who face non-financial barriers to care which limit their access to the health care system. These access services address language and cultural differences, limited office hours, inconvenient provider locations, and lack of transportation.*

*Over time, as health system reform progresses, responsibility for most clinical services will shift away from public health to certified health plans and managed care providers. The timing of this transition will depend on the pace of increased insurance coverage under the uniform benefits package which is scheduled to phase in*

### Health system reform: The opportunity to better understand health status

Currently in Washington State, the principal sources of data for assessing health status are the vital records system (births and deaths), the hospital data system, various disease reporting systems, and surveys which ask a random sample of a population about such topics as tobacco use, seat belt use, and the general state of their health. Other than hospital discharge data, little information is available derived from clinics and other outpatient health care encounter settings. This deficiency should change as health system reform is implemented and the Health Services Information System (HSIS) begins to make available data on the health of certified health plan enrollees.

HSIS will track diagnoses, treatments, and such health determinants as blood pressure, height, weight, and smoking status. It may also contain patient and practitioner assessments of individual patients' overall health status, providing new tools for assessing health status on both an individual and a community basis.

*over the next five years. It will also depend on the comprehensiveness of the uniform benefits package which will determine the extent to which public health resources must pay for certain clinical services that are not included, or are significantly limited, in the package. The development of expertise by certified health plans in serving the diverse groups of people now being served by the public health system is critical to the transition as well. Some capacity to provide clinical services must be maintained in the public health system until it is clear that all residents are enrolled in certified health plans and that those plans are effectively meeting the needs of all their enrollees.*

*The protection of the public's health is of utmost concern in the public health system. Thus, it is not surprising that significant attention and expertise has been focused on clinical services that are provided to individuals, but whose broader aim is to protect whole communities or populations. Public health should continue to provide these clinical services in keeping with a fundamental responsibility to protect the public's health.*

*Currently, the public health system in Washington funds and delivers a variety of clinical personal health services, with the great majority of resources spent in five areas: vaccine and immunization; sexually transmitted diseases (STDs); HIV/AIDS; family planning/reproductive health; tuberculosis. These clinical personal health services are delivered to individuals but also clearly contribute to the health of entire communities.*

*Other clinical personal health services provided by local public health jurisdictions (accounting for a very small percentage of he current spending on clinical services) are personal in nature but do not directly reduce the general public's exposure or risk. Examples include well child exams, speech therapy, breast and cervical cancer screening, and nutrition counseling.*

*The responsibility for clinical personal health services that should remain in the public health system is that of controlling and reducing exposure of the population to hazards, conditions, or factors that may cause disease, disability, injury, or premature death. Consistent with this responsibility, public health must always maintain the capacity to:*

- *Assure the surveillance, diagnosis, and treatment of communicable diseases that, when left untreated, readily spread throughout communities and populations;*
- *Assure that individuals, especially children, are immunized according to recommended public health schedules.*
- *Assure provision of reproductive health services in the community.*

*To meet these responsibilities, public health may or may not directly provide clinical services. This will likely vary greatly over time, and from community to community, as new partnerships and collaborations are developed which create a truly reformed system.*

*The next chapter describes the structured health system and its financing. It includes principles and recommendations for changes to the structure of the system to most effectively carry out the 88 capacity standards described above.*

1. Assessment Protocol for Excellence in Public Health (APEX/PH). APEX/PH is a process for use by local health departments to assist them in better meeting the public health needs of their communities. The process is presented in a workbook which a local health department can use to:

- Assess and improve its organizational capacity.
- Assess the health status of the community
- Involve the community in improving public health

APEXPH supports local health departments interested in enhancing their organizational capacity and strengthening their leadership role in their communities. A strong local health department will better enable a community to achieve locally relevant goals.

The workbook is available from the American Public Health Association, The Guide to Implementing Model Standards. The Guide was developed jointly by the Centers for Disease Control and Prevention, American Public Health Association, and the National Association of County Health Officials.

1993 Model Standards Project • American Public Health Association • 1015 Fifteenth Street NW • Washington, DC 20005.